

Amendments to the Claims

1 (Currently Amended). A blood processing system comprising
a ~~processing chamber filter~~ to process ~~remove leukocytes from~~ blood, and
a fluid flow cassette ~~separate from the filter and~~ communicating with the
~~processing chamber filter~~ comprising

a body,

a pump chamber formed entirely in the body,

a flexible diaphragm on the pump chamber responsive to an applied
fluid pressures for flexure toward and away from the pump chamber to pump fluid blood through the
pump chamber,

a valve formed entirely in the body in communication with the pump
chamber.

a flexible diaphragm on the valve response to fluid pressures for
flexure to open and close the valve in concert with operation of the pump chamber,

a flow path formed, at least in part, in the body, to couple the ~~pump~~
~~chamber valve~~ in fluid flow communication with the ~~processing chamber filter~~, to convey fluid blood
pumped by the pump chamber into the ~~processing chamber filter~~, and

an in line cavity formed in entirely within the body and located in the
flow path to trap air in blood conveyed in the body to prevent entry of air into the processing chamber.

2 (New). A system according to claim 1

further including a blood filtration medium in the cavity.